In the Specification (*Clean copy as amended*)

Please replace paragraph [0010] with the following:

C1

[0010] The gene encoding poly(GVGVP)$_{121}$(SEQ. ID. NO. 5) has been expressed in different systems including bacteria (Daniell, 1995; Guda et al., 1995; Daniell et al., 1997; Urry et al., 1995), fungi (Herzog et al., 1997) and tobacco plants (Zhang et al., 1995, 1996; Daniell 1995; Daniell and Guda, 1997). Following expression of a small, 100 amino acid polypeptide (GVGVP)$_{20}$ (SEQ. ID. NO. 4) in *E. coli* (McPherson et al., 1992), larger versions of the same polypeptide (GVGVP) (SEQ. ID. NO. 2) containing 121 repeats (605 amino acids) or 251 repeats (1255 amino acids) were hyperexpressed in *E. coli* (Guda et al., 1995; Brixey et al., 1997). Bacterial cells showed polymer inclusion bodies occupying up to 90% of their cell volume under optimal conditions (See Figure 1). Production of polymers by fermentation, however, is not cost effective when compared with petroleum based polymers. Therefore, we have recently expressed the GVGVP (SEQ. ID. NO. 2) 120mer in tobacco. Even though lower levels of expression were observed in cultured tobacco cells (Zhang et al., 1995) and some transgenic plants in the F0 generation (probably due to the position effect and heterozygous nature, Zhang et al., 1996), higher levels of polymer expression were observed in transgenic plants after self-crossing in the F1 generation; inclusion bodies have been observed in tobacco cells (see Figure 2), which is a good indication of a very high level of PBP expression (Daniell, 1995; Daniell and Guda, 1997). The transgenic tobacco plants expressing this PBP grew, flowered and produced seeds normally (Zhang et al., 1996). Physiological and

ultrastructural studies reveal that transgenic tobacco plants expressing PBP are similar to control untransformed plants.

Please replace paragraph [0014] with the following:

[0014] In contrast we attempt here to express a protein polymer and not a polyester. PBPs used in our study are expressed from a single synthetic gene that can easily be altered to increase the fiber strength, water absorption, thermal properties, elasticity and dye binding capacity of cotton fiber by changing the amino acid composition. We attempt to accomplish this using a gene encoding $GVGVP_{121}$(SEQ. ID. NO. 3); this gene has been expressed at high levels in bacteria (Figure 1; Daniell et al., 1997) and tobacco plants (Figure 2; Daniell and Guda, 1997). Transgenic tobacco plants expressing this PBP grew, flowered and produced seeds normally (Zhang et al., 1996). However, this gene has not previously been expressed in cotton fibers.